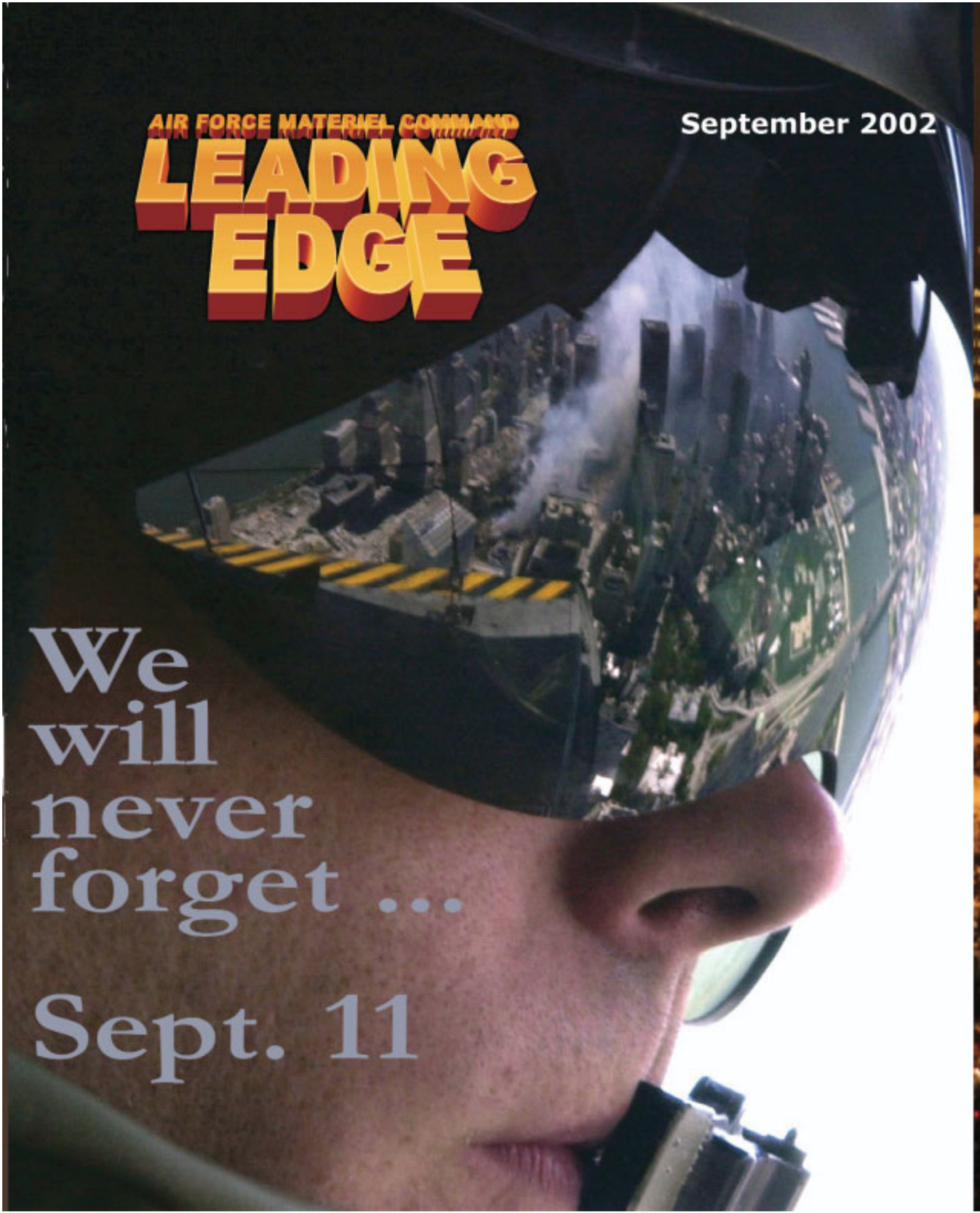
AIR FORCE MATERIEL COMMAND

LEADING EDGE

September 2002



We will never forget ...

Sept. 11

LEADING EDGE

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AFMC
AIR FORCE MATERIEL COMMAND

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Front cover: Smoldering fires of the World Trade Center reflected in the visor of an Air Force flight engineer after the Sept. 11 terrorist attack. (Air Force photo by Staff Sgt. Michelle Leonard)

Cover stories

4 - 18 We will never forget ...

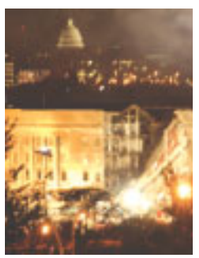
Sept. 11, 2001, is a date that will always be remembered by Americans. Not only did that day affect us individually, it also demanded that Air Force Materiel Command step up and demonstrate its capabilities to support the warfighter. AFMC proved it was and is up to the challenge.

Mission Progress

Features

Departments Briefs

CORRECTION: In the July edition, Mr. Darren Heusel, OC-ALC Public Affairs, contributed to the story on page 14 titled "Command mission constant over decade of service."



Back cover: Aftermath of the attack of the Pentagon. (Navy photo by PO2 Robert Houlihan)
Cover design by Ms. Sarah Anne Carter, AFMC/PAI

ABL completes first flight

KIRTLAND AIR FORCE BASE, N.M. — The Airborne Laser recently made its maiden flight, circling over western Kansas for more than an hour before landing at McConnell AFB, Kan.

It was the first time the aircraft — an extensively modified Boeing 747-400F destined to be the world's first directed-energy combat aircraft — had flown since it arrived in Wichita on Jan. 22, 2000, straight off the Boeing assembly line.

The flight was the first in a test series designed to prove the aircraft still performs like a Boeing 747 despite the significant structural and operational changes made during its two and a half-year stay at the Boeing Maintenance and Modification Center, which is adjacent to McConnell.

Once testing is completed, the ABL will be turned over to the Air Force, the first in a visualized fleet ready for use as a first line of defense against missile attack.

Sometime in the next few months, YAL-1A will be flown to the Boeing facility in Everett, Wash., to be sprayed Air Force-gray and have the number 00-0001 painted on the tail. The number, assigned when the aircraft came off the assembly line, signifies it is the first new military aircraft of the millennium.

Then it will be flown to Edwards AFB, Calif., where the other weapon system segments — the lasers and the optical system — will be incrementally installed and tested. That process is expected to take almost two years and includes laser firings on the ground and against a number of objects in the air such as balloon-dropped target boards and short-range rockets in preparation for its major test against a ballistic missile.

— Information provided by AFRL Public Affairs

Tinker employees kick off new era in B-1 capabilities

TINKER AIR FORCE BASE, Okla. — The most recent history-making aviation feat for the Air Force has Tinker fingerprints all over it. It only took 20 seconds, but the bombing mission proved three different kinds of bombs dropped from a B-1B could hit three different targets in a single pass and was the moment they had been waiting for.

Now, Tinker employees, along with the B-1B System Program Office and Boeing, will begin the upgrade of the entire fleet, kicking off a new era in bombing capability for the United States.

The road that brought this part of the Block E upgrade into being is long and shows Tinker involvement at almost every turn. From the software engineering and testing to program management and installation, Tinker experts left their mark.

The Software Division of the Aircraft Management Directorate, teamed with Boeing software engineers, designed and tested the diagnostic software. All of the software integration was also done at Tinker in a one-of-a-kind facility before the flight test at Edwards AFB, Calif.

The new software will reduce life-cycle costs and has plenty of room for growth, according to Mr. Mike Parish, lead electronics engineer.

— Information provided by OC-ALC Public Affairs

Thrust stand to improve aircraft flight capabilities

EDWARDS AIR FORCE BASE, Calif. — A stand that will test vectored thrust characteristics of aircraft and help improve flight performance capabilities is being assembled here.

Managed by the 412th Test Wing Project Management Directorate, the multi-axis thrust stand, or MATS, consists of three 80-foot towers, which are joined by a T-frame and set to measure vectored thrust aircraft.

According to Mr. Carl Schudde, MATS project manager, the stand is key to thrust testing of future aircraft at the Air Force Flight Test Center.

Once the stand is completed, Edwards testers can suspend an aircraft up to 50-feet high and connect sensors to measure thrust results from any angle.

Data taken from the stand, such as pressures and temperatures, will feed into a control room then be compiled and analyzed. After the data is analyzed, the information will be used to better understand the aircraft's thrust characteristics.

This in turn will help make this new, sometimes-unpredictable form of thrust more predictable to the pilot.

In addition to suspending an aircraft, the stand is adjustable as well. It can be raised and lowered to measure the thrust from short takeoff and vertical landing in aircraft like the Joint Strike Fighter.

— Information provided by AFFTC Public Affairs

AFRL develops detector for ALC inspections

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Researchers from the Air Force Research Laboratory traveled to Hill AFB, Utah, recently to train depot production radiography personnel to use Digital Radiography systems, a technology to improve and simplify nondestructive inspection of aircraft.

Researchers demonstrated the use of a high-resolution digital flat panel x-ray detector and its software. The transition provides personnel at air logistics centers with highly improved tools for evaluating complex aircraft structures. The technology also provides personnel with high-resolution capability, enhanced performance and reliability over conventional film-based radiography methods.

Under a contract with AFRL Materials and Manufacturing Directorate's Nondestructive Evaluation Branch, General Electric Corporate Research and Development Center, Advanced X-ray Inc. and Varian Inc. were asked to deliver products for use in the nondestructive inspection of aircraft structures.

Radiography inspection is used during aircraft manufacturing, maintenance and repair to locate hidden defects such as cracking, corrosion, foreign object damage, voids and moisture in aircraft materials and structures.

— Information provided by AFRL Public Affairs

Smoke billows from the Pentagon after a high-jacked commercial jetliner crashed into the building Sept. 11, 2001. The Pentagon crash followed an attack on the twin towers of the World Trade Center in New York City in one of the worst terrorist actions in history. (Air Force photo by Tech. Sgt. Jim Varhegyi)

AFMC support vital to War on Terrorism

It was a Tuesday morning last September and American people were facing the seemingly routine challenges of the day. Then, about mid-morning, news programs reported an aircraft had crashed into one of the famous World Trade Center towers in New York City.

Reporters and other people around the country speculated that the pilot might have had a heart attack or simply misjudged his position, but history would show that wasn't the case at all. In fact, while many people watched those reports, a second aircraft crashed into the other tower as terrorists attempted to blacken America's eye as snuffed out futures blackened the sky.

An aircraft crash attack on the Pentagon and a failed attempt that ended in a field in Pennsylvania followed. That became another day that will live in infamy.

A day we'll never forget

"All of us woke up Sept. 11 and realized we were playing our first home game since the civil war, the score was 3,000-plus to nothing and we were losing," said Army Gen. Tommy Franks, commander of U.S. Central Command, during a recent visit to Tinker Air Force Base, Okla.

The Sept. 11 attacks on America are the worst in recent history and launched America's fighting machine into action at locations around the globe — every unit focused on eliminating the terrorist threat and bringing justice to those responsible. An event Gen. John Jumper, Air Force chief of staff, recently called his most memorable moment in recent history seems to set the stage. It happened during Game 7 of this year's World Series.

A grateful nation

"People were lined up 10 deep to thank me for what I do; but they weren't just speaking about me, they were thanking everyone who wears a uniform," he said. "One of the women I met, her husband was killed in one of the trade towers. As I reached out my hand and struggled for the right thing to say ... she never gave me a chance to talk. She gave me a big hug and said, 'you get those guys.'"

Speaking at the Airborne Warning and Control System 25th anniversary celebration at Tinker, Gen. Jumper said, "It's the people in this room today — highly skilled, full-fledged members of the technological age — who are going to partner with others with other skills, and no matter what you do you're going to be a part of us tracking down these guys one at a time and taking them out. It's you who are going to get these guys."

Providing the tools

To eliminate threats to our security, America's warfighters are putting their peacetime practice sessions into play on the battlefield and Air Force Materiel Command members are providing them the tools they need to be victorious.

"Every sortie launched, every target confirmed, every bomb dropped and every radio contact completed in support of our war on terrorism happens because AFMC people continue to anticipate and meet the needs of America's warfighters," said Gen. Lester Lyles, AFMC commander.

Calling AFMC members warriors supporting warriors who are "focused on our warfighting capabilities, needs and requirements," Gen. Lyles said he doesn't think people quite appreciated what that really meant until 9/11.

"We understand what the requirements are for the guys who have to sit in the operational seats and fly the airplanes — we are warriors ourselves," he said.

Gen. Lyles said AFMC members have a lot of great things to be proud of when it comes to supporting America's warfighters since the Sept. 11 attacks.

Success stories

Surging key precision munitions, spare parts flow and production along with aircraft depot maintenance; putting the new acquisition spiral development concept to work by fitting the Predator with Hellfire missiles; and pushing new technologies to support homeland defense barely scratch the surface.

> ***"AFMC people are meeting the warfighter's needs and we've proven that we are prepared to meet the challenges of an ongoing war on terrorism."***
>
> **Gen. Lester Lyles**

"The precision guided munitions that have been so highly touted in this war were beginning to be appreciated even more so in Kosovo, the air war over Serbia," Gen. Lyles said. "How we did that and how we developed those systems, how they've played a major role, how we've surged to get even more of those systems into the hands of the warfighters today, I think, is a success story that probably has not been told adequately.

"Equal to that, we've surged our capabilities at a couple of our depots to make sure some of the necessary airplanes, particularly the tankers, were put into the hands of the warfighter faster. That surge capability and immediate support to the warfighter, I think, are what we can be most proud of since 9/11."

Pulling together

If any good can come from such a tragedy as Sept. 11, Gen. Lyles said the unification the nation has experienced and support for those military members, civilians and contractors protecting our country fits the bill.

"It's the appreciation for what our people do and the recognition that they are making sacrifices in many respects to make sure that what happened never happens again," he said.

— Tech. Sgt. Carl Norman, AFMC Public Affairs

AFMC meets warfighters' needs today

In the year following the Sept. 11 attacks on the World Trade Center and Pentagon, Air Force Materiel Command officials took a close look at its acquisition and development process and surged to meet the warfighter's needs.

The result was a redefined mission and vision statement and the emergence of spiral development, a revolutionary process to deliver new technologies to the warfighter as they are developed, giving warfighters increased capabilities when they need it most - today.

Spiral development

According to Lt. Gen. Charles Coolidge, AFMC vice commander, the most visible technology, and one of the best examples of spiral development AFMC delivered to the warfighter this year is the intelligence, surveillance, and reconnaissance platform, the Global Hawk unmanned aerial vehicle. Although the system is still in the developmental, test and engineering phases, AFMC delivered it to the warfighter for use in Afghanistan during Operation Enduring Freedom.

"AFMC leaders didn't know what to expect of Global Hawk in a combat situation, and they knew the risks would be greater in combat," said Gen. Coolidge. Still, AFMC made the decision to push Global Hawk early, knowing there may be failures. "Our leadership was willing to take those risks to meet the needs of the warfighter," he said.

Weighing the risks

Lt. Gen. Dick Reynolds, commander, Aeronautical Systems Center, Wright-Patterson Air Force Base, Ohio, also touted the influence of Global Hawk.

"Global Hawk's capability is unmatched. It proved to be the star of intelligence, reconnaissance and surveillance missions of Enduring Freedom," he said. "What it gave the battlefield commander in terms of persistence and high resolution, real geo-locations of very important targets is unmatched. AFMC didn't have anything that could do that. It is a risk, but a benefit trade-off."

Those risks proved to be real as two of the aircraft crashed during combat operations.

"Losing two planes is going to delay the remainder of the systems development demonstration and puts a lot of pressure on the testing, but it was a positive trade," Gen. Reynolds said.

According to Gen. Coolidge, AFMC looked at the capability Global Hawk would bring and made the decision to deploy the weapon system.

"We had to decide whether to use sensors that are less capable, already tested and ready for the field, and risk more lives, or make the decision to risk more capable sensors.

"We ran the risk of losing those sensors or the system itself," he said using the analogy "life versus technology," akin to remarks made by Secretary Roche that having "microchips die for their country is preferable to placing people at risk."

"I think we made the right decision for all the right reasons," Gen. Coolidge said.

Transform the way we work

The Sept. 11 attacks on America and the ensuing war on terrorism has transformed the way AFMC does its job, according to Gen. Reynolds.

"One of the transformational aspects of acquisition and development is bringing operators into the loop faster to meet warfighter needs earlier," he said.

AFMC has done just that according to Gen. Lester Lyles, AFMC commander.

"AFMC people are meeting the needs of the warfighter. We have proven that we are prepared to meet the challenge of an ongoing war on terrorism."

— Capt. Dave Smith and 2nd Lt. Gailyn Whitman, AFMC Public Affairs

Complying with National Command Authority directives, Davis-Monthan AFB, Ariz., personnel carry out necessary procedures to ensure the safety and security of the installation and its personnel. (Air Force photo by Staff Sgt. James Steele)

'Eagle Eyes' encourages airmen to increase terrorist awareness at home

In response to potential terrorist threats, Air Force Chief of Staff Gen. John Jumper recently implemented an Air Force-wide defensive program for detecting and deterring terrorism called Eagle Eyes.

"The Eagle Eyes program encourages all citizens to be alert and to report suspicious activities or any out-of-the-ordinary occurrences that may indicate force-protection threats to Air Force people and resources," said Special Agent Frankie Holt, Air Force Office of Special Investigations Region One at Wright-Patterson Air Force Base, Ohio.

OSI Special Agent Gary Johnson of Tinker AFB, Okla., helped launch the Eagle Eyes program with the creation of a counter-intelligence awareness brochure.

Agent Johnson and AFOSI Detachment 114, Tinker, actually led the awareness campaign.

"Immediately after Sept. 11, Det. 114 launched a community awareness campaign under the name Proactive Liaison Antiterrorism Network," Agent Johnson said. "In May 2002, Headquarters AFOSI directed us to develop the Eagle Eyes program. Our name has changed, but our homeland security program remained intact."

> ***"If you are asking yourself how we will fight and win this latest war, then the answer is by every person being vigilant ..."***
>
> **OSI Special Agent Frankie Holt**

"The Tinker Eagle Eyes program involves more than 90 local businesses around the base," he said. "We maintain regular contact with these businesses and they in turn report all suspicious activities surrounding the base."

The OSI office at Tinker encourages awareness of any suspicious activity that might be a threat to the base. "Look for a person photographing or videoing the base or a person asking 'unusual questions' about base security or personnel," Agent Johnson said.

"Remembering details is the key," he said. "If you witness any suspicious activity, it is important to remember as much detail as possible. Write down license plate numbers and make and model of suspicious vehicles. Note the description of the occupants, color of clothes, height, weight, etc. Write down details of a conversation if it occurs."

The Tinker OSI brochure also reminds citizens that a terrorist can be anyone, of any nationality. "Try to focus on 'unusual activity' not a particular ethnic group," he said.

Agent Holt encourages awareness of these other suspicious activities around Air Force bases: surveillance of buildings or activities, testing security safeguards, potential threats to forces, bases or missions, attempts to obtain sensitive information, unusual repeated activities and any suspicious incidents or people.

"Don't be afraid to report suspicious activities, if you see something unusual call your local Security Forces desk or OSI office," he said.

Sixty years ago two teams of Nazi saboteurs landed by U-boat at Long Island, N.Y., and Ponte Vedra, Fla. They planned to blow up New York City's water system, Penn Station and the Brooklyn Bridge. They also planned to destroy movie theaters and department stores.

The Nazi's were caught before they could cause any damage. Their plans were foiled, due in part to the awareness of Americans to a new enemy threat, said Agent Holt.

"If you are asking yourself how we will fight and win this latest war, then the answer is by every person being vigilant and reporting all suspicious activity to your local Security Forces Eagle Eyes hotline," Agent Holt said.

— 2nd Lt. Gailyn Whitman, AFMC Public Affairs

Bittersweet smell of success

AFMC brings it on for Operations Enduring Freedom and Noble Eagle

An Air Force weapons loader from the 28th Air Expeditionary Wing gives a signal that the 2,000 pound bomb he prepped is ready for loading on a B-1 bomber in support of Operation Enduring Freedom. Air Force B-2, B-1 and B-52 bombers have expended more than 80 percent of the tonnage dropped on combat missions over Afghanistan. (Air Force photo by Staff Sgt Shane Cuomo)

Air Force Materiel Command is a diverse command. The following are just a few examples of the many ways AFMC and its installations support warfighters on numerous initiatives that impact combat today.

AAC accelerates testing in direct support of warfighters

EGLIN AIR FORCE BASE, Fla. — The 46th Test Wing at the Air Armament Center planned and conducted accelerated and quick reaction flight and ground testing of 24 separate programs. The programs include: LUU-19 Flares, Hellfire Missile Debris Deflector, MH-53 Threat Scripts and the MK-20 Leaflet Delivery System. These programs provide support to, and are in conjunction with, all branches of service.

— Information provided by AAC Public Affairs

Program keeps engineers, warfighters in touch

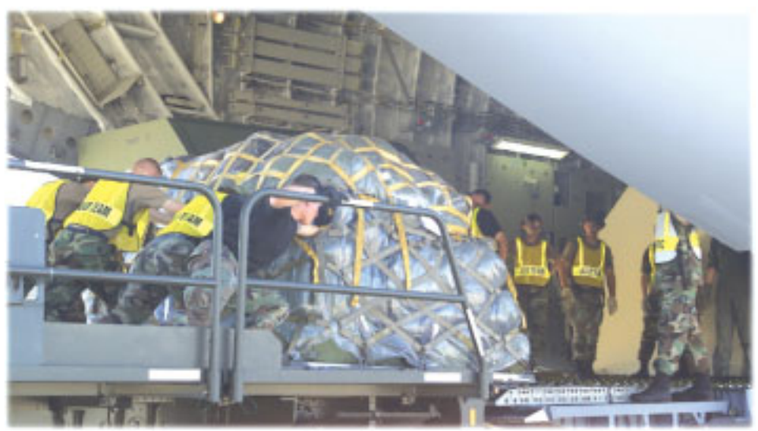
EDWARDS AIR FORCE BASE, Calif. — Air Force Flight Test Center is home to a unique training program designed to keep AFMC pilots up-to-date with their operational counterparts. Started by the 416th Flight Test Squadron, the program is a one-on-one exchange bringing operational pilots here to expose them to the role developmental test plays in warfighter support. In turn, test pilots are traveling to fighter bases across the Air Force to stay in touch with today's warfighters by flying tactical missions.

— Information provided by AFFTC Public Affairs

Arnold helps United Nations monitor rouge nations

ARNOLD AIR FORCE BASE, Tenn. — The United States and United Nations can better identify capabilities and threats of rouge nations that our troops may face in the field, and develop countermeasures and targeting of those systems. Test techniques used at Arnold Engineering Development Center are helping the United Nations monitor future foreign static rocket tests to determine if users are in violation of U.N. sanctions against performance enhancements of these rockets.

— Information provided by AEDC Public Affairs



Cargo is being loaded onto a C-17 aircraft at Davis-Monthan AFB, Ariz., in support of Operation Enduring Freedom. (Air Force Photo by Staff Sgt. Jim Steele)

C-17 System Program Office cuts normal delivery time

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Aeronautical System Center is providing more airlift for warfighters in the air operations center and combat zone through an acquisition surge giving warfighters critical aircraft parts in less than one-fourth the normal delivery time. The ASC C-17 System Program Office completed an acquisition surge of a system-wide shortfall of nose landing gear adapters cutting delivery time from seven months to six weeks.

— Information provided by ASC Public Affairs

Reclaimed parts support warfighter operations

DAVIS-MONTHAN AIR FORCE BASE, Ariz. — Aerospace Maintenance and Regeneration Center reclaimed and shipped more than 1,000 aircraft parts during March 2002. A majority of these removals satisfied priority requests. Sixty-one parts represented the needs of B-52, C-130, F-16, KC-135 and F/A-18 aircraft deployed in support of Operations Enduring Freedom and Noble Eagle.

— Information provided by AMARC Public Affairs

Tech. Sgt. "Ivan," from the Air National Guard's 150th Fighter Wing at Kirtland Air Force Base, N.M., stands watch over two KC-10A Extender refueling aircraft. Although the KC-10's primary mission is aerial refueling, it can combine the tasks of a tanker and cargo aircraft by refueling fighters and simultaneously carrying support people and equipment on overseas deployments. The KC-10 can transport as many as 75 people and nearly 170,000 pounds of cargo up to 4,400 miles unrefueled. (Air Force photo)

When you absolutely, positively must have it now

ROBINS AIR FORCE BASE, Ga. — The warfighter has more low density and high demand aircraft available for mission requirements thanks to the acquisition teams at Warner Robins Air Logistics Center. Several repair surge contracts for the AC-130 Gunship, 105 mm manifold assemblies were awarded in less than 24-hour turn-around-time, which is normally a 70- to 100-day process.

— Information Provided by WR-ALC Public Affairs

Tinker quickly advanced weapons to warfighters

TINKER AIR FORCE BASE, Okla. — Oklahoma Air Logistics Center's Cruise Missile Product Group responded to the events of Sept. 11, 2001, by accelerating both the flight test program and ultimate delivery of the AGM-86D Conventional Air Launched Cruise Missile Penetrator. This missile is equipped with an advanced unitary penetrator warhead capable of penetrating soil and steel-reinforced concrete. This achievement provides warfighters with a new weapons system capable of holding at risk high value hardened and buried targets from a stand-off distance, keeping the aircraft and aircrew out of harm's way.

— Information provided by OC-ALC Public Affairs

Hill response team continues to surge warfighter munitions

HILL AIR FORCE BASE, Utah — The Air-to-Surface Munitions Directorate surged nearly 9 million pounds of munitions to support Operation Enduring Freedom in 2001, and is continuing the same pace in 2002. The directorate's readiness division maintains a 24-hour response center to supply munitions worldwide, and saved the Air Force more than $1.5 million in replacement costs by using 135 members of the Air Force Reserve Ammunition Teams to return munitions to serviceable condition.

— Information provided by OO-ALC Public Affairs

Brooks helps aeromedical evacuation step forward

BROOKS CITY-BASE, Texas —Two aeromedical evacuation systems allow airlift planners to provide better care and more options ensuring injured warfighters are moved quickly to medical facilities. The 311th Human Systems Program Office recently delivered two systems in support of Operation Enduring Freedom. The Stryker 965 is a new gurney that provides injured warfighters better care during evacuation missions, and has an integrated traction system which protects patients with neck and spinal injuries. In addition, the frame can turn or rotate to reduce bedsores. The second system, the patient support pallet, allows personnel to transform cargo aircraft into an aeromedical transport platform in less than an hour.

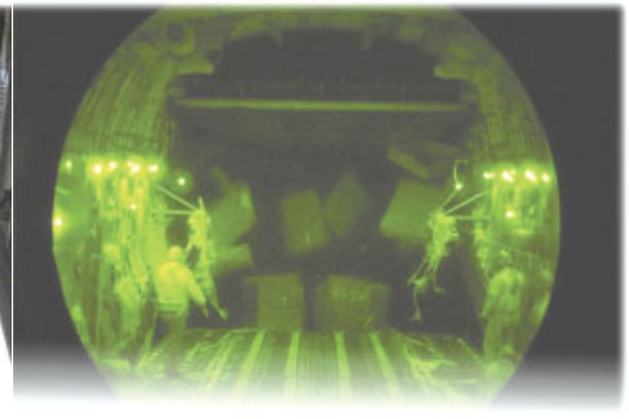
— Information provided by 311th HSW Public Affairs

ESC streamlines deployment taskings Air Force-wide

HANSCOM AIR FORCE BASE, Mass. — The deliberate and crisis action planning and execution segment is handling all Air Force deployment taskings. In March, Electronic Systems Center worked with nearly all Air Force major commands to transition the Air Force to using the segment. This software program allows the Air Force to plan and implement movement of personnel anywhere in the world to meet planned, rotational and contingency deployments. The system users, planners and commanders responsible for defining the Air Force's response requirements send and receive accurate data ensuring ability to account for deployed personnel.

— Information provided by ESC Public Affairs



Brooks City-Base contributes to humanitarian efforts

When terrorists attacked the United States last fall, every military installation in the country saw a change in its immediate mission. Service members went from carrying out a peacetime military mission to becoming troops in war.

At Brooks City-Base, Texas, the focus was not so much on battle as it was on humanitarian missions. Four members of the U.S. School of Aerospace Medicine traveled to the Persian Gulf area, two helped aid troops and two aided the people of Afghanistan.

Col. Virgil Jefferson and Col. Rob Allen traveled to Qatar and Krgyzstan in June to examine and evaluate the effectiveness of the Expeditionary Medical Support course and the Critical Care Air Transport Team course. Col. Jefferson is the head of EMEDS and Col. Allen is in charge of the team.

"We were sent to get a first-hand idea of how the Air Force medical service is training our people for deployments to those far advanced bases," Col. Jefferson said. "We were seeing if the training here is what is needed there. We had conversations with commanders of both U.S. and coalition forces, and they like what they see in terms of EMEDS."

Working under stress

The critical care air transport team is a two-week course and EMEDS is a one-week course that trains medics for battlefield medicine. Besides learning to use field equipment, students learn to work quickly and under the stress of war.

"We try to hit every aspect during the course," Col. Jefferson said. "We handle the mental, emotional, physical and surgical aspects. The stresses of war are really important and you have to address those issues."

And the training is helping. According to both men, the response from both leaders and trainees in Operations Enduring Freedom and Noble Eagle is positive and the knowledge critical. "There's no doubt it saves lives," Col. Jefferson said.

In previous times, medics evacuated critical-condition patients to a field hospital and then out to a permanent hospital on a base in friendly territory. Now patients can be cared for and stabilized immediately with less transport.

"We're taking an intensive care unit and putting it in a very alien environment," Col. Allen said. "We're taking doctors, nurses and technicians who usually work in stable ICU units and teaching them to work in that alien environment."

According to both men, the knowledge that medical help is nearby takes some fear and stress out of battle. Troops know that if they were to be hurt, they would be aided quickly.

The critical care and EMEDS training gives medical personnel the confidence to work in battle environments and the ability to deploy at a moment's notice.

Taking care of one another

"I think it gives them a really good taste of what's to be expected," Col. Jefferson said. "I can now go to the course and tell the students they need to take care of each other. I think that we provide the training of Air Force medical personnel so they can deploy at a moment's notice anywhere in the world and feel confident and competent enough to take care of patients and save lives."

However, members of USAFSAM aren't only caring for American and coalition forces. The EMEDS and critical care team trainees know they must provide the same level of care for prisoners of war. American troops also train to take care of innocent people suffering in enemy countries, like Afghanistan.

Tech. Sgts. Carl Crane and Ronald Sankeralli, physiology technicians at USAFSAM, traveled to Ramstein Air Base, Germany, to participate in food drop missions to the Afghan people. The two were deployed from October through December 2001.

"After 9/11 we heard some of these food drops would be taking place," Sgt. Crane said. "I emailed Chief Dan Bowers at Air Combat Command and said that if he ever needed someone to let me know. Sgt. Sankeralli said 'Put my name, too.' A week later we got the call."

Air Force rules require a physiology technician to be aboard all unpressurized aircraft performing airdrops traveling above 18,000 feet. All personnel riding on the aircraft must undergo physiological training for the experience.

During one of Sgt. Crane's missions, the oxygen hose on one of the loadmasters disconnected and the man dropped to his knees and became hypoxic. The loadmaster on the left side went to help and his hose also disconnected. Sgt. Crane plugged the hose back in on the first loadmaster and then dragged the second loadmaster to the other side of the plane and reconnected his hose.

"My heart rate and breathing were highly accelerated," he said. "Initially, there was some hesitation from the aircrew why we had to be there until there were some cases of hypoxia."

An important mission

Sgts. Crane and Sankeralli flew a combined total of 31 missions. However, as many as four aircraft left Ramstein every evening to deliver the packages. "Those people would die without that food," Sgt. Crane said. "Being able to do this good thing is very important. We dropped more than 2 million humanitarian daily rations. An airlift of this magnitude hasn't been done since the Berlin Airlift. We dropped more than 3,800 tons of food and supplies to the Afghan people and Northern Alliance."

The rations were stored in refrigerator-sized and shaped cardboard boxes, which were dropped from the back of a cargo plane. The boxes sat on the floor of the aircraft and were held in place by a cargo strap and electronic locks. When the plane arrived at the drop zone, the pilot raised the nose of the aircraft 7 degrees and the locks were released and gravity did the rest, allowing the boxes to roll off the aircraft.

The cardboard disintegrated in the air, and the culturally-sensitive, yellow-wrapped rations dropped to the ground. Several people collaborated to find points of impact far enough from people to avoid injuries, but close enough to communities that the food could be quickly gathered.

The rations included picture instructions because the Taliban spread propaganda that American forces were leaving bright yellow cluster bombs. "Initially, I don't think this person understood we were there to help them," Sgt. Crane said, pointing to the turbaned man on the instruction card.

A life-changing experience

Though Sgts. Crane and Sankeralli know the importance of their mission, and found themselves changed by the experience. "It made you thankful for what you did have," Sgt. Sankeralli said. "It gives you a different perspective. We should be thankful to be Americans."

Sgt. Crane came home with similar sentiments. "I think you would be a callous, uncaring person if it didn't change your outlook," he said. "It was an awesome experience."

After arriving home, Sgt. Crane, who had been ready to retire, decided to remain with the Air Force and was selected for promotion to master sergeant.

The mission also gave the men a chance to represent America's armed forces at their best. "This is part of why I joined the military, to serve my country," Sgt. Sankeralli said. "It shows the rest of the world we're not just out for revenge. Doing humanitarian work was really cool."

Making the world a safer place

The men got a reward for their good works. Thinking they wouldn't arrive in the states until the new year, their orders got them home Dec. 23, just in time for Christmas. Both men's wives were in joyful tears, greeting their husbands for the holidays. "My wife was blown away," Sgt. Crane said.

Thanks to the work of members of USAFSAM, a few other people will be able to enjoy future holidays with their loved ones as well.

— Ms. Rita Boland, 311th HSW Public Affairs

Photos from left to right: Tech. Sgt. Carl Crane, a physiology technician assigned to the U.S. Air Force School of Aerospace Medicine at Brooks City-Base, Texas, during a humanitarian aid mission in support of Operation Enduring Freedom. Middle: Personnel at Ramstein Air Base, Germany, help to load a C-17 transport plane with containers of humanitarian daily rations. Right: During a mission where rations were dropped over Afghanistan. (Air Force photos)

Robins leans forward in 9/11 aftermath

Whether it's stepping up security procedures, surging spare parts, supporting international allies or just taking care of one another, team Robins is up to the task

Sept. 11, 2001, the unthinkable happened. As most Americans sat glued to their television sets, watching in horror as terrorists attacked the country in a way unlike any other since Pearl Harbor, government leaders were already planning a course of action.

As was the leadership at Robins Air Force Base, Ga.

Increasing security

Within minutes, the base implemented heightened security measures by donning protective gear and closing all but two gates. No one was allowed to enter the base without showing an identification card. Security procedures, although altered slightly, have stayed in affect since then.

Robins AFB, Ga., firefighter Amn. Sean Barnette collects a donation for victims of the 9/11 terrorism. Firefighters at Robins raised more than $10,000 in contributions. (WR-ALC photo)

"I don't know if there are enough superlatives in the English language to describe the feeling you get from the way our people responded," said Col. Jay Seward, former 78th Air Base Wing commander. "The shield of the 78th ABW is stitched together with a chain, and that chain got stronger as the week went on and people focused on the task at hand."

The mission continues

That task, according to Maj. Gen. Dennis Haines, then Warner Robins Air Logistic Center commander, is to carry on with the mission.

And that's exactly what team Robins has done. "We are leaning forward to make sure we provide the spare parts and equipment our managers manage at Robins," said Gen. Haines. "We're making sure that our units, if called to do anything, are ready and at the maximum state of readiness."

One of the ways this is being accomplished is that all production teams have gone to two 10-hour shifts, and in some cases two 12-hour shifts to expand ability to produce the parts and aircraft.

Mr. Al Fatkin, C-5 System Program office deputy director, said the extended shifts have done little to affect morale. Col. C.R. Davis, F-15 System Program office director, agrees.

"Team Eagle was literally tearing at its leash to be able to support our F-15 fleet," he said. "Within 24 hours, the F-15 team had worked numerous scenarios related to parts surge and aircraft acceleration."

And during July, the avionics management directorate reached two significant milestones by producing its 10,000th and 13,000th surged units since 9/11. Since the terrorist attacks, the division has worked through the initial rush of production and met every demand. Surge is now an everyday occurrence that has become part of the daily workload.

Beyond our borders

Robins has also been instrumental in assisting United States allies in their support on the worldwide war on terrorism.

One example of this was when President George W. Bush pledged a C-130B transport to Philippine President Gloria Macapagal Arroys on Nov. 20. Team Robins delivered on that promise Nov. 30. "Our government made a commitment and we were able to fulfill it expeditiously," said Capt. Alan Coonce, International Division Branch chief.

The Hercules No. 61-0954 had not flown since 1998 and required extensive depot-level maintenance to return it to flying condition. Fuel tank leaks, autopilot malfunctions, altimeter errors, radio inoperability, engine abnormalities and obsolete parts were just some of the barriers to success that Team Robins overcame. "The C-130 Production Division worked 24-hours-a-day, seven-day-a-week, to get this job done," said Ms. Joye Marshall, Foreign Military Sales Program manager.

Within 24 hours of the 9/11 terrorist attack, Team Eagle at Robins had worked numerous scenarios related to parts surge and aircraft acceleration to support the F-15 fleet. (Air Force photo)

Above and beyond the call of duty

And the commitment of Robins employees goes far beyond the scope of their regular work assignments.

Civilians volunteered to augment security forces at Robins gates to answer a perplexing problem — getting 15,000 to 20,000 people through the gates in peak hours while conducting a 100 percent identity checks of each driver and passengers.

"One exceptional aspect of this plan is that it gives the civilian sector an appreciation for what security forces do day in and day out to get the work force on the installation," said Lt. Col. Al Jamerson, commander of the 78th Security Forces Squadron.

"Using civilian volunteers also has cemented the military-civilian partnership, giving them a real sense of playing a personal and important role in our operations. Now more than ever, people are coming to the realization that force protection is everyone's responsibility, not just security forces."

And Robins firemen banded together to raise $10,000 in financial relief to the families who lost loved ones in the 9/11 attacks by standing at base red lights for two days wearing helmets and reflective gear and carrying the distinctive black boots people have become accustomed to seeing in community fire department drives.

— Mr. Geoff James, Mr. Chris Zdrakas and Ms. Lanorris Askew, WR-ALC Public Affairs, contributed to this story

Tinker IMAs make immediate impact after 9/11

Mobilization is their middle name. So when volunteers were sought to help fight the war on terrorism soon after the Sept. 11 attacks on the East Coast, 53 Individual Mobilization Augmentees assigned to Tinker Air Force Base, Okla., answered the call to duty and have been doing so ever since.

According to Mr. Richard Blochowiak, Air Force Reserve advisor at Tinker, their impact was felt immediately as they filled in at units hit hardest by deployments in support of Operations Noble Eagle and Enduring Freedom.

Immediate response

"Within a day or two of the attacks, we had numerous calls from our security forces folks primarily asking to volunteer, which is typically our first course of action," he said. "One of our first priorities was to secure the base.

"Within a week to 10 days, it was obvious this was going to be long-term, so we began to activate folks," said Mr. Blochowiak. "Once we got all our security forces folks on board, we began to look at other areas that expressed a real need."

Mr. Blochowiak said the IMAs volunteered for different reasons, but most expressed an interest in wanting to do their part to help ease the burden of their active duty counterparts deployed in the war effort.

"All these folks have good attitudes," Mr. Blochowiak said. "Their impact has been tremendous. The minute they arrived they were integrated into the active force."

Several of the volunteers were assigned to the 72nd Security Forces Squadron here, while others were needed in war plans, services, personnel, logistics management and supply and other areas.

Ready and willing

One of the many volunteers was Senior Master Sgt. Celersteen "Pepper" Brown, who temporarily left her management position and 15-year career at J.C. Penney to fill in as superintendent of lodging at Tinker.

Sgt. Brown was activated Nov. 5, 2001, and hit the ground running, as two active duty staff members deployed upon her arrival.

"When this first happened, I thought it was an accident," Sgt. Brown said. "Then, I suddenly realized we were being attacked. I was in total disbelief that something like that could actually happen.

"I did try calling and eventually was asked if I were needed would I volunteer. The answer was 'yes.' There was no way I could say no."

One of Sgt. Brown's first responsibilities was to ensure superior service for the more than 180 NATO Airborne Warning and Control System personnel who had arrived at Tinker in October.

She continued to support their needs for nearly six months while they made their home at the Indian Hills Lodge in support of Operation Eagle Assist.

Sgt. Brown's help in accommodating the NATO troops was highlighted when the Indian Hills Lodge was lauded with the Gold Key Award, designating the lodge as the "Best in Air Force Materiel Command" for 2002.

"Pepper has been a trooper," said Mr. John Seabury, Indian Hills general manager. "She dove right in and has been doing a tremendous job ever since, which is why Sgt. Brown was selected as AFMC Services IMA of the Year."

The Indian Hills Lodge at Tinker is often the first impression people will form of the base; therefore, Mr. Seabury said it's important to maintain a quality work force.

"We're representatives of base leadership, so we have to do things right," he said. "I've worked with Pepper throughout the year and she's just been an extraordinary asset."

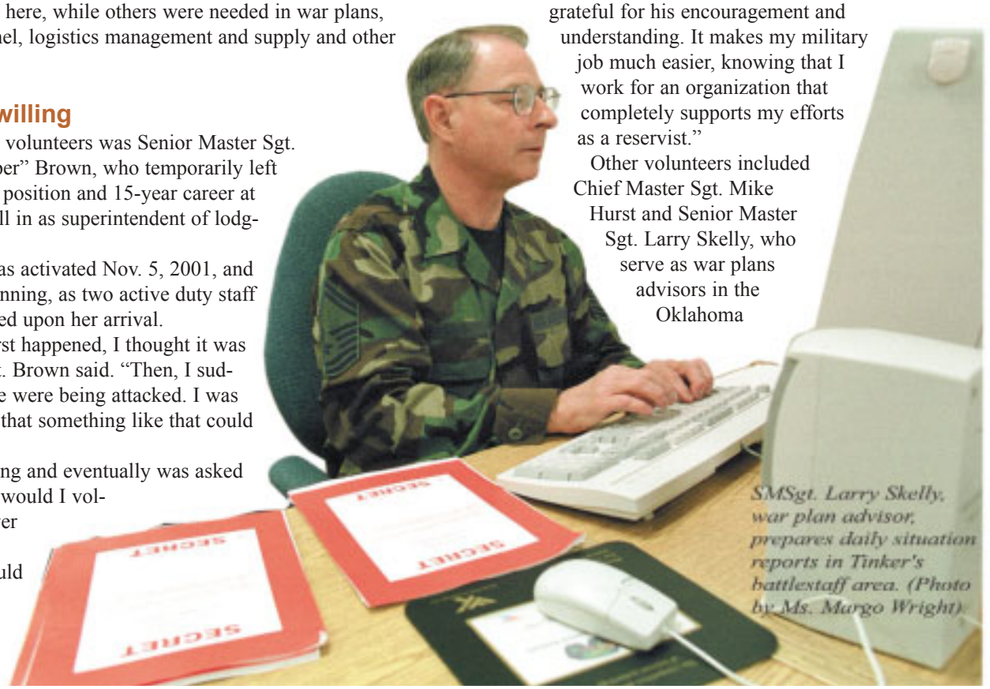
Giving and receiving support

Sgt. Brown's employer at J.C. Penney also helped make the transition a smooth one and, as a result, was presented the "My Boss is a Patriot" award for his support of Sgt. Brown during her recall to active duty.

"My boss, Mr. Don Car, really is a patriot," Sgt. Brown said. "Both myself and another reservist who work for him are truly grateful for his encouragement and understanding. It makes my military job much easier, knowing that I work for an organization that completely supports my efforts as a reservist."

Other volunteers included Chief Master Sgt. Mike Hurst and Senior Master Sgt. Larry Skelly, who serve as war plans advisors in the Oklahoma City Air Logistics Center Battlestaff.

"Sgt. Hurst and Sgt. Skelly have done an absolutely fantastic job," said Col. Travis Rattan, another IMA on active duty serving as one of a handful of Battlestaff directors, who provide Tinker Installation Commander Maj. Gen. Charles Johnson II with pertinent information he needs to support the warfighter. "I've relied on them heavily to get the job done."



SMSgt. Larry Skelly, war plan advisor, prepares daily situation reports in Tinker's battlestaff area. (Photo by Ms. Margo Wright)

Qualified to backfill

Sgt. Skelly has been in the IMA program since early 1994. When he was activated on Dec. 3, 2001, he didn't have to go far because he serves full-time as a civil service employee in Tinker's E-3 International Support Branch.

"When you're in the Reserve, you should be ready and willing to go when your services are needed," said Sgt. Skelly, who has more than 30 years total service to the Air Force. "When I first came on board, the Battlestaff was working around the clock so I think the chief and I were able to provide some relief right away.

"I think my background has helped out quite a bit in some of the taskings that have come through here. I've just been happy to help out. I haven't seen it as a hardship in any way. I feel I have an obligation to get back to my regular job as soon as possible, but at the same time I feel this is pretty important, too."

Mr. Bob Patterson, chief of the Wartime Plans and Contingency Operations Division at Tinker, summed up what most supervisors feel about their IMAs when he said, "These guys are worth their weight in gold. This is the second time I've had to mobilize these guys and they have just been outstanding."

The IMAs are all on orders for one year, and can be extended another 12 months. But most, like Sgt. Brown, said being mobilized comes with the territory and it's an obligation they accept fully.

"I have no respect for those people who enjoy the gravy when times are good, but don't volunteer when the time comes," he said. "To me, this is what you sign up for."

— Mr. Darren Heusel, OC-ALC Public Affairs

IMAs play key role at Hanscom

The largest mobilization of Individual Mobilization Augmentees ever took place in the Air Force Reserve Command following the Sept. 11 terrorist attacks, according to Air Force officials.

IMAs are reservists assigned to active-duty units in specific wartime positions. and more than 2,000 were called into action within 45 days of the attacks, a number that eventually grew to more than 3,100 as the enormity of the mission set in, AFRC personnel officials said.

It's not easy

The mobilization was no easy task, said Maj. Gen. Ralph Clem, mobilization assistant to the chief of Air Force Reserve at the Pentagon. Considering this amounted to about 25 percent of IMA end strength, he acknowledged there were issues that needed to be resolved. "This was a historically unprecedented mobilization of our IMAs," Gen. Clem said. "We've never come close to this number.

"In an amazingly brief period of time hundreds, if not thousands, of IMAs were on duty — involved in America's fight against terrorism, with many of them forward-deployed early on," he said. "We did a great job of getting a large number of exceptionally skilled people to the fight almost immediately."

Significant numbers

At Hanscom Air Force Base, Mass., those numbers are smaller, but significant, said Col. Philip Meteer, an IMA called up as interim commander of the 66th Air Base Wing at Hanscom. About 75 Hanscom IMAs were brought on to active-duty service following President Bush's order for a reservist call-up, he said. Most of IMAs brought to active duty were for the 66th Air Base Wing.

While Col. Meteer, who is a civilian contractor at Hanscom, was just recently brought onto active duty, most of the Hanscom IMAs were brought onto active duty to support the mission of Homeland Defense or in support of Operation Enduring Freedom.

Everyone has a story

A civilian police officer, Staff Sgt. Chuck Nickerson is one of those activated. He spent more than seven years on active duty before joining the Reserve to stabilize his love of the military, his family life and his desire to be a civilian policeman. He voluntarily come in on Sept. 11, and because he was called onto active duty by President Bush's Reserve call-up, he isn't sacrificing his civilian job. It is, however, hard on his family life. The father of a 19-month-old child, he usually gets to spend about an hour with his daughter before she goes to bed. "I talk to her more on the phone than I see her in person," he said.

Maj. Lynne Pitts started supporting Homeland Defense about an hour after the attacks on Sept. 11 began. A civilian contractor on base, she is serving as Hanscom's deputy chief of base plans and programs. She voluntarily came in to start the Crisis Action Team, a 24-hour, seven-day-a-week team of people who manage base support functions during a time of crisis.

She considers herself lucky because the company she works for has a policy that when a person working for them is called to active-duty, they make up the difference in basic military pay to what they would make in their normal job. In Maj. Pitt's case, she said it was a significant amount.

"A lot of us never get the honor of serving our country in a wartime environment, but to be a part of the team after the first-ever attack on the continental United States feels great," she said.

— Tech. Sgt. Eric M. Grill, ESC Public Affairs

Terrorist attacks change some AFMC lives forever

"Every American can probably remember exactly where they were and what they were doing on that otherwise lovely early-autumn day on Sept. 11, 2001, already almost a year ago. I was just taking a break from mowing the lawn, having just moved back to New York from Arizona and was enjoying the last green of the summer foliage and the clear blue skies of upstate New York.

Many of us have felt the loss of people we knew counted among the nearly 3,000 innocent Americans killed while doing nothing more than reporting to work and going about their daily lives. I am one of those who occasionally pauses to remember former hometown classmates lost on that day of infamy.

My personal loss came when I heard a class member from my high school had gone down in the crash in Pennsylvania. Mr. Ed Felt was older than I, but I remember him well. I was in his brother's Boy Scout troop and remember him

Mr. Jeff Maier

as an inquisitive lad when we met at his house. Years later during the cold winters in New York, he was a member of the school ski-club. I can picture him cutting turns down the slopes as I rode up the chair lift watching. He was an excellent skier and was bold enough to ski off-trail between the trees in the woods.

I would not be surprised if he was one of the "Let's Roll" guys from the flight date recorder later dug out of the cornfield at the crash site.

I believe he was living in Silicon Valley and working as a programmer, returning from a visit with his family back East. He leaves a wife and children behind. The Felt family had been through a lot over the past few years with Ed's father dying fairly recently, and now the loss of the son in a senseless act of terrorism.

Unfortunately, there was also an alumni from my college that went into the South Tower. I did not know her personally, but do feel the loss more poignantly because, like myself, she was an Rochester Institute of Technology graduate. I can't begin to comprehend how awful it must have been for the poor people aboard those airliners before the final moments came. Such a waste of life and national property lost that day.

I often consider the time that has passed since then and the change that has occurred in the national psyche by the bridging of our island-nation mentality from the mayhem of the rest of the world. I know it will never happen, but I for one would like to see the towers rebuilt as they were before the attacks."

— Mr. Jeff Maier, AFRL Associate Electronics Engineer

"I was stationed at McChord AFB, Wash., and serving as an Instructor Aircraft Commander, as well as the Chief of Combat Tactics. I had an upgrade student out on a short out-and-back to Japan following a day off in Hawaii.

Another crewmember from McChord was headed out to Australia as we were headed back to McChord. Their aircraft had just received a call from home that his child was involved in a bad accident and was hospitalized. I volunteered to swap spots and take the other crew "down under" while he went home. That was Sept. 10, 2001.

On that infamous day we spent the night in Richmond, Australia, awaiting a planned bus at 5:30 a.m. I received a call at 1 a.m. advising me the Twin Towers had been hit, that my mission was cancelled and to await further orders.

At 6 a.m. the crew bus showed up and we scurried to find everyone since I had told them to sleep in. Our mission, a quick out-and-back within Australia, was back on. We spent the next five hours trying to get a straight answer as to whether we should launch or not. Finally, we took off and headed for Alice Springs.

When we got there, I was confronted by several Aussies telling me that I needed to call my commanders. Since Alice Springs is in the Outback, communication was extremely difficult. My copilot finally used his calling card on the only payphone to contact them. They told him to divert to Carnes and pick up former President Bill Clinton. When he told me, my first response was to tell him that it wasn't funny. When I was convinced, my next question was, 'Where the hell is Carnes?'

The crew pulled together to get the needed preparations done and proceed to Carnes. When we arrived there, we had no American presence. The Quantas Airlines personnel took us in, providing food, office space and telephones — free of charge. Great chaps down there! When the former President arrived with his entourage, we quickly loaded him and took off for Guam. The route took us all the way around New Guinea, landing 23 hours after the attack. There, a KC-10 was waiting to whisk him back to safety."

— Lt. Col. David Penny, C-17 Future Programs IPT

Crew with former President Clinton

As Mr. Ralph Kohler, Air Force Research Laboratory Sensors Directorate engineer, watched the towers fall on Sept. 11, 2001, the way he looked at his research changed dramatically. He has been actively involved in research and development for 15 years, and he realizes the need to transfer emerging technology to the warfighter, today, as well as years from now.

"All around me in AFRL there were solutions to many issues facing the military fighters," he said. His focus shifted from research and development contracts and journal articles to figuring out how to implement today's technology into immediate operational capabilities.

Last November, Mr. Kohler responded to a request for assistance that he read on the Internet. "I headed to the Pentagon to give a briefing, and found myself in Germany the next day."

Air Mobility Command and United States Air Force in Europe were looking for a solution to a problem facing forces deployed to Operation Enduring Freedom. He proposed a solution using commercially available, off-the-shelf products which was immediately embraced by the command.

After the success in Germany, Mr. Kohler was sought out by the 20th Air Support Operations Squadron, to assist with the problem in their close air support tasking procedures. Essentially, the process was being implemented in the same way it was during the Vietnam Era, and the air controllers felt there had to be a better way. Mr. Kohler agreed, and brought together a team of volunteers from both the Sensors and Information Directorates to solve the problem.

Working closely with the 20th ASOS and the 174th Fighter Wing, an Air National Guard unit based in Syracuse, N.Y., Mr. Kohler and his team learned the fundamentals of the close air support process from both the pilot's and ground controller's perspective.

"Again, using available technology, we formulated the basics for totally automating CAS tasking," Mr. Kohler said. They proved the concept during the recent Team Patriot 2002 exercise conducted at Ft. Drum, N.Y., and successfully passed a CAS tasking message from the ground to an F-16 cockpit using a totally automated process. A full up demonstration was conducted at the end of July with great success.

Mr. Ralph Kohler

Mr. Kohler looks at these opportunities to use existing technologies in new and innovative ways to assist the warfighters as his "hobby."

— Ms. Larine Barr, AFRL Public Affairs

"I was TDY to Albuquerque, N.M., the week of Sept 11, 2001. I awoke around 6:30 a.m. Mountain time Tuesday and turned on the hotel television to see the smoke flowing from a hole around the 80th floor of Tower One of the World Trade Center. Within 30 minutes I saw the second hijacked plane fly into Tower Two.

I felt fear and disbelief — mostly disbelief.

I completed getting ready for a design review I was attending at the Honeywell facility in Albuquerque, then saw faces of concern and bewilderment in the visitor lobby at Honeywell.

After getting our visitor badges, attendees of the meeting filed into a conference room. We tried to conduct the meeting in a routine fashion but found ourselves rushing to television monitors in the meeting room to gain some insight into the mornings tragedy. Then, we saw the almost unbelievable image of a third hijacked aircraft burrowing into the Pentagon.

Engineers are an inquisitive breed who take pride in understanding the environment surrounding them. So, you can imagine the tension in a room full of engineers who could not explain the actions they had witnessed that morning.

We spent the next two days completing our design review before trying to determine how to get home. I had a wedding to attend Saturday and a flight from Albuquerque to Dayton, Ohio, looked very unlikely until Saturday afternoon at the earliest. I pointed my rented Ford Focus to the east and a dark sky at 6 a.m. Thursday morning.

As I approached a small New Mexico community I noticed American flags waving in the breeze. I did not pay close attention until I saw more flags as I passed through Amarillo, Texas.

The theme continued in Tulsa. As I entered the outer parts of St. Louis, the bridges above Interstate 44 exploded with American flags and wishes of sympathy and prayer to victims in New York and our nation's capitol. It is then I realized that we are a United States of America, emphasis on United. Midwesterners make fun of the arrogant, rude tendencies of New Yorkers, but when tragedy strikes, we come together.

Radio talk shows continued to hammer at the theme that New Yorkers and military families would not have to deal with this tragedy alone. All Americans in some way had been attacked.

I pulled into Dayton International Airport at 6:30 p.m. Friday evening. I was tired and my body was in the need of a good warm bath, but my heart was warm because it had experienced more than 1,600 miles of caring that only this great nation can muster."

— Mr. Bob Larsen, ASC Mobility Special Program Office engineer

FBI agents, firefighters, rescue workers and engineers work at the Pentagon crash site on Sept. 14, 2001, where a highjacked American Airlines flight slammed into the building on Sept. 11. The terrorist attack caused extensive damage to the west face of the building and followed similar attacks on the twin towers of the World Trade Center in N.Y. (DOD photo by Tech. Sgt. Cedric Rudisill)

Just another 'normal' day

— Ms. Sarah Anne Carter
AFMC Public Affairs

On Sept. 11, 2001, I woke up and got ready for work in Omaha, Neb., and just like any other day, I was full of hopes, dreams and ideas, but not doing much about them.

My family members were all in their "normal" places. My brother Stephen was in class at a local college. My mother was at home on Bolling Air Force Base, D.C., and my other brother Matthew was in high school near the base. My father was at work in the Pentagon.

I've always considered us a pretty lucky military family because although my father had gone away to numerous temporary duty assignments and schools, he was never deployed or pulled for a remote tour. And we always joked that if a war happened, my father had a "safe" job — finance. We always thought he'd be at the bottom of the list if people were called up to deploy. We never guessed a war would come to him.

When I heard that a plane had hit the World Trade Center, I turned on the radio and went online to read the news. It was only a short time later that I found out a second plane hit the Trade Center. It was no longer a tragic incident, but an attack — terrorism.

My cell phone rang and my mom had an edge in her voice as she told me the news had reported the Pentagon was being evacuated due to a fire. First they said it was a fire, then a helicopter crash, then a small plane crash, and finally a 747 crash. Each updated report resulted in another phone call.

It was a long morning and every time my phone rang, I expected the worst. I could hardly hold the tears back as I worried about my family. At the end of the day, would my parents and little brother be alive? My mother and I kept in touch through our cell phones. Each call was more frantic than the last one as the minutes turned into hours and we still had no word from my father.

After spending hours worrying and crying, I picked up my phone and heard the best sound in the world — my father's voice.

Nothing's been normal since. My entire family was affected by the close call we had that day. My father took a hard look at his priorities after he realized just how precious life is to him. My mom is constantly aware of the world around her, weighing the benefits of visiting a tourist attraction against the possibility of that place being the target of a terrorist attack.

Stephen is working a civil service job while in college. He's been paying more attention to the news and realizing that America is not an invincible nation. We should not take our liberty for granted.

Matthew found out how quickly the world could change as a normally 30 minute bus ride home started taking hours, complete with a thorough inspection of the bus before it was allowed to take him onto the base where he lived.

I found a renewed sense of purpose and chose to serve my country by accepting a civil service position at Wright-Patterson AFB, Ohio. I wake up each morning full of the same hopes, dreams and ideas, but instead of going about a "normal" day, I spend my day doing my part in supporting the mission of the United States Air Force. And there's nothing normal about that.

Who's stopping whom?

EDWARDS AIR FORCE BASE, Calif. — Members of the California Highway Patrol recently shared their own version of stealth technology with the Air Force at the 410th Flight Test Squadron at Air Force Plant 42 in Palmdale, Calif. The squadron and its F-117 Nighthawks helped the California State Troopers unveil their new "stealth" cruiser. Once fielded, new all-white, unmarked versions of the Camaro cruisers will be on the lookout for unsuspecting speeders on California's highways. The squadron, part of Edwards Air Force Base, Calif., is home to the F-117 Combined Test Force, which conducts all developmental test and evaluation in support of the Air Force's F-117 operational units.

— Information provided by AFFTC Public Affairs

Air Force photo by Mr. Peter Torres, AFFTC

Expansion takes shape at U.S. Air Force museum

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The appearance of arches may evoke thoughts of the St. Louis skyline, but at the United States Air Force Museum here, it heralds a fast-approaching era of substantial growth.

Construction crews recently put in steel frame arches, introducing the public to the quickly developing structure that will be the museum's 200,000-square-foot third building. The hangar is the centerpiece of a major museum expansion, with follow-on phases to include a hall of missiles, a space gallery and an education center. The building is expected to open to the public in Spring 2003.

A master plan calls for the new hangar to house aircraft and exhibits reflective of the era from the Cold War to the present, permitting the museum to present Cold War history from an Air Force perspective and to realign the flow of exhibits and aircraft into a more chronological format.

— Information provided by U.S. Air Force Museum Public Affairs

AFMC announces ALC transformation plans

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — A single maintenance directorate will soon stand up at each of Air Force Materiel Command's three air logistics centers, transforming them to better support America's warfighter.

As part of the command's and the Air Force's broad transformation initiatives, the single maintenance directorate will focus solely on depot-level maintenance and be considered essential to success of the ALCs in today's world. Command officials said the reorganization is expected to have little direct impact on ALC employees.

This reorganization is a fundamental part of a larger Depot Maintenance Reengineering and Transformation initiative. This maintenance reorganization sets the foundation for other significant improvements and transformation efforts throughout AFMC and the Air Force.

While employee moves from one organization to another will be necessary, there's no plan to reduce the total number of jobs as a result of the reorganization. Where there are position changes, every effort is being made to minimize or eliminate the impact.

While the details of the new directorates of maintenance at each ALC have been worked out, changes to other organizations at the ALCs are still being studied. The complete ALC transformation will continue through 2003.

— Information provided by AFMC Public Affairs

AFRL, local colleges partner in cyber security

ROME, N.Y — The Air Force Research Laboratory Information Directorate will enter a partnership with several local colleges to establish an educational program in the emerging fields of cyber security and information assurance.

Dr. Joseph Bordogna, deputy director of the National Science Foundation, recently announced a $199,000 NSF "cyber corps" grant has been awarded to Utica College. The college will partner with the Information Directorate, as well as Syracuse University, the State University of New York Institute of Technology at Utica/Rome, and Mohawk Valley and Herkimer County community colleges.

The grant will create programs for associate's, bachelor's and advanced degrees in the information assurance field, expanding on an existing computer forensics program at Utica College. Students participating in the program will serve as interns at the AFRL Rome Research Site and several high technology firms in the area.

— Information provided by AFRL Public Affairs

LANTIRN's performance lights the way for the warfighter

Mr. Jimmy Swint, an electronic technician at Robins AFB, Ga., works on the nose section of a low altitude navigation and targeting infrared for night targeting pod, or LANTIRN. A direct sales agreement between the Air Force and Lockheed Martin for commodity repair has significantly reduced the LANTIRN's turnaround time. (Air Force photo by Ms. Sue Sapp, WR-ALC)

In less than one year of operation under a historical direct sales agreement between the Air Force and Lockheed Martin, the Avionics Management Directorate Production Division at Robins Air Force Base, Ga., has proven it has what it takes to support the warfighter.

In July 2001, Maj. Gen. Dennis Haines, former Warner Robins Air Logistics Center commander, signed the Air Force's first direct sales agreement for commodity repair. The agreement stipulates that the avionics production division will perform depot-level repairs on low altitude navigation and targeting infrared for night shop replaceable units for direct delivery to Lockheed Martin Missiles and Fire Control.

A significant reduction

Recent figures show that after just nine months of operation under the agreement, the production division has reduced Lockheed's LANTIRN shop replaceable unit repair turnaround time by approximately 75 percent. For the 190 items the division has repaired since August, the division's average turnaround time has been 21 flow days compared to the previous vendors' 86-day average for similar repairs.

As a direct result of these flow day reductions, LANTIRN roll section line replaceable unit flow days have also been reduced by eight days and backorders have decreased from 40 to two during this same time period. Line replaceable units are line items with associated stock numbers. Shop replaceable units are subassemblies of line replaceable units.

Behind the scenes

The division's success is nothing short of remarkable and it provides an excellent benchmarking story. However, falling squarely behind the production division's success is the direct sales agreement and the Air Force and Lockheed's commitment to supporting the warfighter. An example of this continuing commitment is Lockheed's recent request for the avionics division to repair 64 more items than those 163 items already covered by the agreement.

"The direct sales agreement is one of the reasons that the LANTIRN weapon system, specifically the targeting pod, is mission capable today," said Mr. Gregg Fogarty, chief of the avionics management's precision attack, radar and manufacturing branch.

Providing multiple benefits

He believes the agreement provides three-fold benefits. For the Air Force, the Avionics production division is better able to exercise its depot-level capabilities and capacity. For industry, Lockheed Martin is now able to pick up and repair line replaceable units faster because it does not have to wait so long for shop replaceable unit vendor support.

But the ultimate benefactors, the warfighters, have gained the most from this partnership. "They now have the items they need, on the shelves, when they need them," he said.

According to Mr. Fogarty, LANTIRN leadership birthed the partnership with Lockheed after Operation Desert Storm when sales of the LANTIRN navigation and targeting pods — the two weapons systems that make up LANTIRN — increased by 50 percent, primarily to foreign nations.

"Even with the increased pod sales workload, the Air Force's repair capacity remained the same," he said.

— Mr. Leslie Nelson, WR-ALC Public Affairs

F-22 weathers Eglin climatic lab tests

While Eglin Air Force Base, Fla., temperatures soared into the sizzling mid-90s, snow fell on the Air Force's newest fighter, the F-22 Raptor, which was undergoing three months of extreme weather testing here.

During the tests, technicians from the 46th Test Wing will put the F-22 through grueling weather conditions ranging from extreme cold to desert-baking heat.

The aircraft does not have to leave Eglin to experience these extremes — the laboratory provides the weather. It is the world's largest environmental testing chamber and can produce almost any weather condition in the world.

According to Mr. Brent Poulson, the F-22 combined test force climatic laboratory program manager, since the F-22 arrived at Eglin in early June, the Raptor has been subjected to cold weather tests such as 40 degrees with its engines running, and then 65 degrees without an engine run.

"We had eight inches of snow on top of the aircraft and also performed a wind-blown snow test," he said.

About 70 people from Edwards AFB, Calif., accompanied the aircraft here to analyze how the F-22 performs in weather extremes.

"We've been planning these weather tests since at least 1987, and the tests are an extremely integral part of the program," said Brig. Gen. William Jabour, program executive officer for fighter and bomber programs for the assistant secretary of the Air Force. The general visited the F-22 CTF recently while attending a conference here.

"It's especially critical for the F-22 [to undergo the weather tests] because of the materials and coating that give the aircraft its stealthiness," he said.

The laboratory has one main chamber and five smaller chambers. There, test engineers can create an array of weather conditions ranging from a blasting blizzard of blowing snow or a deluge of rain to freezing rain to stifling desert heat or humid, muggy heat; salt fog or sand storms. Temperatures in the laboratory can range from minus 105 degrees to 165 degrees.

During the tests, the aircraft is configured so that all its operating systems are functioning. Engineers use tie-downs and struts so that the aircraft can operate all its systems as if it were flying.

When the aircraft runs its engines, ducting carries the exhaust out of the laboratory. An air replacement system feeds in a vast amount of air that is ingested by the engines at the same temperature as the test chamber and at the same rate that the engine uses the air, said Mr. Kirk Velasko, 46 Test Wing F-22 climatic lab engineer.

"Tasks during the test runs included landing gear control, control sweeps, simulated weapons launch and engine power settings up to full afterburner," Mr. Poulson said. "During the cold weather tests, overall, the aircraft performed well.

"There were some subsystem engine, support equipment and maintenance anomalies discovered," he said. "That's why we do these tests. We want to find out now so we can fix things."

Mr. Poulson, from Edwards AFB, Calif., was impressed with the laboratory's capabilities.

"It's amazing to see an aircraft on jacks inside of a hangar running the engines with one afterburner going," he said. "It's also pretty amazing that we can go from 8 inches of snow on the aircraft to 113 degrees in four days."

Upcoming tests for the F-22 include high temperature, high humidity and an assortment of rain tests including freezing, steady and wind-blown rain. The Raptor will also undergo engine icing and cold maintenance demonstrations, which test how well the maintainers can support the aircraft in cold weather.

— Lt. Col. Debbie Millett, AAC Public Affairs

The F-22 Raptor, the Air Force's newest fighter aircraft, takes on three months of Mother Nature's worst elements during weather tests in the McKinley Climatic Laboratory at Eglin Air Force Base, Fla. (Courtesy photo)

AFMC delivers P.R.I.D.E. to the warfighter

— Gen. Lester Lyles
AFMC Commander

In a rapidly changing world, Air Force Materiel Command faces one constant as a command; the operational community depends on us to provide the capabilities needed to defend the United States and protect its interests.

AFMC Mission

Although the Air Force's core mission remains the same, the way we accomplish that mission is being dramatically transformed. A changing world has added new requirements and highlighted the need for new and transformational capabilities.

Knowing they can't challenge us conventionally, our enemies look for ways to exploit and attack any perceived vulnerability. The nation needs AFMC to "plan, develop, field and sustain integrated air and space capabilities for dominant warfighting effects — today and tomorrow." This is the core mission we've been performing since we stood up as a command a decade ago.

Our mission remains on target, but the processes we'll use to achieve that mission are being transformed to meet new threats and a changing environment.

Secretary of Defense Donald Rumsfeld challenged us to "adapt quickly to challenges and uncertainties."

AFMC Vision

In order to meet these new challenges, I've implemented a new vision for the command: AFMC delivers **P**roactive **R**apid development, fielding and sustainment of **I**ntegrated **D**ominant warfighting **E**ffects to the warfighter.

Proactive — We're developing a culture that stresses the need to aggressively anticipate and develop capabilities that not only meets our customers' requirements, but exceeds them. Part of the solution is improving communication between AFMC and the operational communities — warriors supporting warriors!

Too often we think of ourselves as separate and distinct communities. This couldn't be further from the truth.

The operational community relies on us to plan, develop, field and sustain the contract systems they need and we rely on them to educate us on what capabilities are required. They're counting on us to be responsive to their needs and provide innovative solutions.

We can't afford to get locked into old paradigms; we must focus on new ways of thinking and operating. Other priorities are placing more emphasis on science and technology and establishing a culture of innovation. It's also important that we not be risk-adverse, but encourage innovative thinking, even if it comes with some risk.

As former baseball great Yogi Berra once said, "The future ain't what it used to be." The world is changing and we must anticipate, understand and react to those changes.

Gen. Lester Lyles, commander of Air Force Materiel Command, recently announced new vision and mission statements for the command. Here, Gen. Lyles helps deliver P.R.I.D.E. in the form of the Air Force's newest C-17 Globemaster III. The C-17 was flown from the Boeing facility in Long Beach, Calif., to Charleston AFB, S.C. (Photo courtesy of Boeing)

Rapid — We must respond quickly to warfighter needs as they transform to meet the many challenges they face. It's imperative we significantly shorten the development and acquisition cycle times currently needed to field weapon systems as well as supply and depot maintenance.

We're testing a process industry uses called spiral development on five of our most prominent programs. As opposed to getting bogged down in an endless test and fix loop while trying to build to the 100 percent requirement, spiral development enables you to "build a little, field a little, fix a little."

We'll build to the 70-80 percent requirement and continue to improve the system over time. This technique, common in industry, has the potential to exponentially shorten the acquisition time needed to field new capabilities.

It's far better to deliver a capability today and refine it during the next decade than to wait for a decade before delivering any capability at all. We must also shorten the process times to repair and maintain our warfighting capabilities. Capabilities are only effective when they're out of our hands and in the hands of the operators.

Integrated — We're using an enterprise leadership process that focuses not on individual stove-piped weapon systems but on capabilities. It's critical that our capabilities are seamlessly integrated together to provide the best overall warfighting synergy.

Information from a satellite, Predator and J-STARS individually might be useless to the bomber pilot.

But when that information is fused together, it might provide the exact picture of an important target. It's important we develop an integrated system of systems where the individual platforms are subordinate to the battlefield effect we aim to achieve.

Dominant — We must maintain our current overwhelming advantage in warfighting capabilities. Our path to accomplishing this lies in our continued investment in capabilities research and development and planning. The United States is the world leader in research and development. Future plans for the Air Force call for significant increases to our current levels of funding.

As Gen. John Jumper, Air Force chief of staff, often says, we're not interested in a fair fight. We're interested in providing the capabilities that give us an overwhelming advantage.

Effects — AFMC's transformation is based on the need to deliver the Air Force Task Force concept of operations capabilities necessary to inflict desired effects on any adversaries should they attack the United States, our interests or our allies.

We start by considering the "effect" we need to achieve and then identify the capabilities required to produce that effect. For example, if we want to destroy high-threat mobile targets within minutes of detection, we need to build and integrate the capabilities required to produce that effect.

In the past, we often started by thinking about individual platforms without considering how they fit into our overall force or capability structure or what we were trying to achieve.

We're now starting with the effect and working our way backwards to the individual systems needed to provide the necessary capabilities.

Facing new challenges

How will AFMC meet the challenges facing the Air Force and our country? I believe we will meet them by delivering P.R.I.D.E. — Proactive Rapid Integrated Dominant Effects — to the warfighter.

We're already off to a great start and I'm excited about our work in the days, months and years ahead as we continue transforming our command to meet the challenges of the 21st century.

Mission Statement

We plan, develop, field and sustain integrated air and space capabilities for dominant warfighting effects — today and tomorrow.

Vision Statement

AFMC delivers Proactive Rapid Integrated Dominant Effects to the warfighter

Air Force seeking elite test pilots

A select few pilots have reached stars of some form or fashion, and the Air Force Test Pilot School helped them along their way.

"About 200 of our graduates have reached the stars in some way or another," said Col. George Ka'iliwai III, TPS commandant, referring to those who have gone on to become generals or astronauts.

For those people currently reaching for the stars, the test pilot school at Edwards Air Force Base, Calif., is accepting applications for the July 2003 and January 2004 classes. While the application process itself is easy and outlined in Air Force Instruction 99-107, applicants should keep in mind that applications must be received by Sept. 19 for consideration in the Nov. 4 to 9 board, said officials.

Assessing the whole person

"We look at an applicant's record and assess the whole person," Col. Ka'iliwai said. "There are a couple of areas we focus on. The most important one is the test pilot candidate's flying record.

"If the pilot was rapidly upgraded to instructor pilot and has a near perfect flying record, that shows us he or she has a tremendous piloting ability and understands the nuances of flying," he said. "We also look at their leadership potential and their academic credentials."

The AFI which outlines TPS eligibility requirements is currently being revised. The school is moving toward using more qualifications-based criteria rather than flying hours-based.

"The biggest deterrent is the number of hours required," Col. Ka'iliwai said. "If they don't meet the 1,000 hour requirement, they should apply anyway."

The test pilot school produces highly trained pilots, navigators and engineers to test, manage and evaluate the Air Force's newest aircraft and aircraft systems.

"The highlight for me has been getting to fly all the different types of airplanes, especially the gliders," said Maj. Ray Toth, a TPS student since January.

Setting high goals

Maj. Toth is one of the students who has his eyes on the stars.

"This is something I've wanted to do since the third grade," he said. "I want to be an astronaut."

Students at the school spend a typical day with several hours in the classroom, in the air and studying, analyzing data and writing reports, adding up to 10- to 12-hour days.

"It's very hands-on," said Lt. Col. Lionel Alford, a test pilot school graduate and chief of the air frame propulsions avionics and electronic warfare team for Air Force Materiel Command headquarters.

He also sits on the test pilot school board.

"What students learn in the classroom, they get to try out that day," he said.

During the 48-week school, students are expected to not only gain an appreciation for different types of aircraft and learn how they operate, they are expected to apply what they learn from

Maj. Ray "Buzz" Toth, test pilot school student, prepares to evaluate the T-38 to see if it could be used for the close air support mission. Maj. Toth was seeing whether the systems on the aircraft and the handling qualities of the aircraft were suitable to be able to work with a forward air controller to deliver ordnance on targets in close proximity to friendly ground forces. (Photo by Lt. Col. Jeff Borton, AFFTC)

"real-world" projects, called test management projects. Some of these include testing spin recovery procedures for new U.S. Air Force Academy gliders, air collision avoidance systems and how safely a Wright Flyer replica can fly during the upcoming Centennial of Flight celebrations in 2003.

Expanding students' vision

"We're asking them to learn how to mitigate risks and conduct flight-tests safely," Col. Ka'iliwai said. "When they flew operationally, they flew in the heart of the aircraft's envelope.

"At the school, we teach them how to expand an aircraft's performance and flying qualities envelopes safely, as well as effectively test and evaluate aerospace systems," he said. "The result is weapons we provide to the warfighter are more lethal, survivable and well integrated."

Test pilot school graduates join a somewhat unique group of about 2,600 people that includes approximately 100 generals, nearly every Air Force military astronaut, about 280 allied officers, and such notables as Brig. Gen. Charles Yeager and Gen. James Doolittle.

"There's prestige," Col. Alford said. "The people who are selected are the best in Air Force aviation."

For more information on the test pilot school and application procedures, call Maj. Tom Floring or Mr. Howard Peterson at (210) 565-2306 or DSN 665-2306 or visit the school's Web site at http://www.edwards.af.mil/tps.

— Ms. Sarah Anne Carter, AFMC Public Affairs

Brooks becomes first City-Base

"City-base will improve mission effectiveness and reduce infrastructure support," said Gen. Lyles.

City and Air Force officials launched a bold, new experiment here July 22 with the creation of Brooks City-Base, Texas, a technology and business center that supporters believe will serve as a national model for innovative economic development.

Gen. Lester Lyles, commander of Air Force Materiel Command, passed a symbolic key for the property and facilities to San Antonio Mayor Ed Garza and Brooks Development Authority chairman Howard Peak during a conveyance ceremony.

A bold new challenge

"The challenge of this age is we must respond with a bold, new experiment," said U.S. Rep. Ciro Rodriguez. "Brooks City-Base will become a magnet for growth by creating opportunities for research and technology that will be needed in the war on terrorism."

This city-base concept is the first of its kind, according to Air Force officials, reducing federal government infrastructure costs while creating a venue for economic growth through business, academic and scientific partnerships.

The move makes the Air Force a tenant on land it once owned and allows base officials to expand research and development opportunities supporting America's warfighters without the responsibilities associated with maintaining a military base.

"We'll be able to concentrate on our vital mission here," Gen. Lyles said. "It will improve mission effectiveness and reduce infrastructure support."

Air Force people at Brooks perform leading edge research to integrate the human element into warfighting systems. The AFMC commander noted that the city-base serves as a national case study on community-government partnerships. The initiative also positions Air Force and San Antonio officials to potentially attract major revenue-producing tenants, such as

Top: Gen. Lester Lyles, Air Force Materiel Command commander, addresses more than 1,000 members of the Brooks community and honored guests during the Brooks City-Base conveyance ceremony July 22 in San Antonio, Texas. (Photo by Tech. Sgt. Pedro Ybanez) Bottom: Mr. Howard Peak, chairman of the Brooks Development Authority, San Antonio Mayor Ed Garza, U.S. Sen. Kay Bailey Hutchison, Gen. Lester Lyles and U.S. Rep. Ciro Rodriguez hold the ceremonial key to Brooks, which changed hands during the conveyance ceremony. (Photo by Mr. Dale Eckroth)

a proposed federal vaccine facility.

Homeland defense

"The future of Brooks and the city is also the future for homeland security," said Mayor Garza, referring to Air Force assets that already exist here that support bioenvironmental health and safety.

Many Air Force missions at Brooks already support homeland defense initiatives. Among them is the Air Force Institute for Environment, Safety and Occupational Health Risk Analysis' Epidemiology Laboratory that has for years developed influenza vaccines supporting the World Health Organization.

— Mr. Rudy Purificato 311th HSW

NYC cop survives terrorist attacks on Brooks 'beat'

New York City Mayor Rudy Giuliani met with him before he left for his mobilization assignment to thank the Air Force reservist for his work in safeguarding city hall workers during the Sept. 11 World Trade Center terrorist attacks. While Master Sgt. Hector Vega now helps safeguard the base community on his Brooks City-Base, Texas, "beat," he admits he'll never forget his most challenging career experience as a New York City cop.

It helps to talk about it

"It helps me to talk about it," he said. Sgt. Vega is an individual mobilization augmentee who since 1985 has served his two-week annual training tours at Brooks. He began his one-year active duty assignment as patrol flight chief here in October.

Sgt.Vega was notified during his 40th birthday party that he was being recalled to active duty. His military assignment came about a month after 9/11. Even for a hardened 17-year veteran of the New York City Police Department, the tragedy had an enormous impact on him.

"I couldn't believe it. The thing that affected me the most was seeing glimpses of people jumping from the towers," he said, explaining that many office workers chose to fall to their deaths rather than be incinerated in fires caused by burning jet fuel.

At the time of the first attack, Sgt. Vega was five blocks from "ground zero" talking with his police lieutenant on the steps of New York City Hall. For seven-plus years, this Manhattan-born detective sergeant had served there on the Municipal Security Section in charge of providing protection for the mayor and his family and other elected officials.

A 22-year Air Force veteran, Master Sgt. Hector Vega, a New York City cop, has been on active duty at Brooks City-Base since October 2001. (Photo by Tech Sgt. Pedro Ybanez, 311th HSW)

"I heard a gigantic roar that sounded like a sonic boom. I looked up and caught a glimpse of the first plane hitting tower one," he said.

"Something told me it was not a routine accident. It didn't seem right," he said. His first act was to quickly secure city hall. "I went into lock-down mode. We shut city hall off to public access." Then he dispatched police officers to conduct a city hall security sweep for explosive devices, a counter-terrorist tactic in case the airplane crash turned out to be a diversionary act.

"I didn't see the second plane, but I actually flinched from the explosion. The fireball was so tremendous that I could feel the heat. I initially thought the second explosion was caused by ruptured gas lines from the first crash."

Panic set in

People began to panic. "I was afraid people were going to be trampled, so I ordered the main gates to city hall opened. We cleared everybody out of the park, but kept city hall workers inside," Sgt. Vega said.

No one then knew how much danger they were in. "I began to evacuate city hall after I learned about the Pentagon and Pennsylvania crashes." He focused on his job, but was worried about his wife and two children.

The massive debris cloud produced when the first tower collapsed quickly obliterated his thoughts of his family's safety. "It was the darkest, blackest cloud I had ever seen. I couldn't see anything. Everybody ran back into city hall. One of the detectives had locked the front doors behind him." Sgt. Vega was locked out momentarily, covered in gritty gray soot.

"The blackness turned to a gray haze. There was total silence. It was very eerie." He was proud of fellow officers, positioned at city hall's various gates prior to the first tower collapse. "Everyone held their position. Then I looked up and saw the second tower collapse."

The nightmare continued unabated for the 48-straight hours Sgt. Vega worked without a break. He had lost many colleagues, including 23 New York City police officers and 343 firemen.

He credits Air Force security forces training for helping prepare him for what transpired on Sept. 11, high praise from a cop who served his rookie year at one of the city's toughest precincts, made famous in the movie "Fort Apache, The Bronx."

"The military really helped me develop my interpersonal skills in dealing with people," he said. The fear, suffering and death he witnessed also gave him new insight. "After living through that, I really appreciate my family and people more."

— Mr. Rudy Purificato, 311th HSW

Security forces sergeant shares purpose, inspiration

"I remember seeing a man attacked with an axe over something in a baseball game. As little kids, we watched that man die in the middle of the street that day. The police had taken more than an hour to arrive." For the then middle school-aged Master Sgt. Gene Alston, 96th Security Forces Squadron, Eglin Air Force Base, Fla., growing up in a Flint, Mich., neighborhood in the 1970s, law enforcement officers represented uncaring, never-present agents of help. That was something he didn't want to be.

Yet it was another policeman's work that forever changed the way he viewed the world and his place in it. While playing in the nearby Martin Elementary School playground, the young Alston was trying to avoid older children gambling on the lot when a tall, mustached cop approached him and his friends.

"He showed up and just wanted to talk," Sgt. Alston said. "It struck me that this man would walk the beat in my neighborhood." The lone policeman, known as Officer James, patrolled the streets, organized baseball games between police officers and children and arranged trips to Tiger Stadium. That's when "I started to see things in a different way," Sgt. Alston said.

With time passing but Officer James' impact never fading, Sgt. Alston is now Eglin's installation security plans and programs superintendent. He works to help others make successful life choices.

Including Officer James, Sgt. Alston credits his grandmother's instruction and a strong faith for his character development and career decisions. "When you live in the inner city, you're a minority and don't have both parents in the house, society labels you as 'doomed,' meant for jail or something like that," he said. "But I saw that life is about choices."

After graduating from high school, Sgt. Alston said he spent a year as a lead singer in a band, then he tried baseball and then decided to become a law enforcement officer. Being too young to enter civilian law enforcement, he turned to the military, joining the Air Force in 1981. "I liked working security in the military, so I stayed," Sgt. Alston said.

Master Sgt. Gene Alston, 96th Security Forces Squadron Installation Security Plans and Programs superintendent at Eglin AFB, Fla., reviews FBI training material he received recently while attending the FBI National Academy. Sgt. Alston was inspired to enter police work while growing up in the inner-city of Flint, Mich. (Photo by Ms. Doris Johnson, AAC Public Affairs)

During his 20-plus year career, he's earned a degree in Criminal Justice from the Community College of the Air Force, and recently graduated from the FBI National Academy program at Quantico, Va., a course that teaches investigative, management and fitness training for law enforcement officers in leadership positions. Two Air Force commissioned officers and two noncommissioned officers are chosen for the program each year.

Although trained in leadership, his favorite part of his task is interacting with the public.

"In this career field, you have a chance to make an influence, whether positively or negatively, with everyone you come in contact with. It only takes one cop to make a difference," he said.

Every year he returns to see friends and family in Flint, and he never forgets the work of Officer James.

"Since children's value systems are still developing, there is such an opportunity to show them a different, better way to live," Sgt. Alston said. "I like to hang out with the kids and talk to them. You never know if maybe there is just one person who needs to hear encouragement."

— Ms. Doris Johnson, AAC Public Affairs

Brooks commander's faith, sense of duty prevail during Pentagon attack

Faith and an inherent sense of duty motivated Col. Albert Bowley, Jr. to risk his life to save others immediately following the Sept. 11 terrorist attack at the Pentagon.

Col. Albert Bowley, Jr.

Serving as a rescue and recovery team volunteer, he helped Lt. Gen. P.K. Carlton, Air Force Surgeon General, save the lives of victims who had been trapped in the debris.

"It was terrible, horrific. It was dark, smoke-filled, full of water and smelled of jet fuel. I wanted to help save somebody. I had no fear for my personal safety," recalls Col. Bowley, who like other rescuers had his face blackened by soot and uniform soaked by water and perspiration. Vivid in his memory is the sight of a gapping hole created by the nose of the commercial passenger jet that had slammed into the Pentagon, killing a total of 325 people.

At the time of the attack, he was working as an Air Force Assistant for Counterproliferation Policy in the office of the Assistant Secretary of Defense for International Security Policy. His office was located on the opposite side of the building from where the hijacked airliner had imbedded itself.

"We heard it fly over our heads. One of my co-workers commented that the jet noise was unusually close," said Col. Bowley, who in July became the 311th Air Base Group commander at Brooks Air Force Base, Texas.

Watching in disbelief

Just minutes before the plane hit the Pentagon, Col. Bowley and his colleagues were watching in disbelief television reports of the World Trade Center attacks. "Moments later we felt the concussion and heard the boom of the jet crashing into the Pentagon. All the alarms in the building went off and we were told to evacuate," he said.

His immediate response was to secure classified material. "When we finally got outside I noticed the medics getting set up," he said, referring to casualty collection points organized to treat injured personnel.

He quickly volunteered to help, grabbed a stretcher and ran to the aid of a critically injured Army lieutenant colonel who had jumped two stories from his office window. "Col. Marion Ward had crawled a long distance through thick smoke.

"I found him on the ground. I tried to keep him from passing out," he said. "He was holding my hand and as I prayed for him it was clear the power of the Lord was passing through our grip. Col. Ward was in shock and was going in and out of consciousness."

Col Bowley comforted him until an ambulance transported the victim to a hospital. He learned afterward that Col. Ward had suffered a heart attack prior to the tragedy. Listed as critical from smoke inhalation, he eventually recovered. "After he came back from the hospital, he thanked me and told me that God had sent an angel to comfort him," confessed Col. Bowley.

He wouldn't quit

Heartened by his role in helping Col. Ward, Col. Bowley joined about 50 other volunteers who formed into teams to search for victims still trapped in the rubble. The teams were organized by an exhausted but determined Air Force Surgeon General who only 30 minutes earlier had used a fire extinguisher to help save a victim engulfed in flames.

"General Carlton was awesome. He had blood on his shirt and smoke stains on his face. He clearly took command of the situation," said Col. Bowley. However, Col. Bowley's team did not find anyone to rescue.

"By the time we got there everybody was dead," he said. Shortly thereafter, the rescue teams were told to evacuate when an intelligence report forecast the possibility of another aircraft attack.

"It was a very tense situation. Everyone was willing to remain if they were needed. General Carlton told all non-medical personnel to evacuate as he was not sure if we would take another hit."

Col. Bowley admits having second thoughts about leaving the Pentagon for a safer place. "I wondered if I had done enough, or what more I could have done," he said.

A few regrets

Afterward, his regrets haunted him. "I wished I had grabbed our first aide kit and run immediately to the site. I knew I would have made a difference."

He spent many sleepless nights replaying his role in the rescue efforts. Several months later he approached Gen. Carlton and told him he was having trouble dealing with the tragedy. "I told him I was having problems controlling my emotions, caused by me not finding anyone alive. He healed me that day. He said, 'You were on my team. Our team saved four people.'"

A then depressed Col. Bowley also had his spirits raised while eating lunch at the Pentagon cafeteria on Sept. 13. He was inspired by a visit from President Bush, Defense Secretary Donald Rumsfeld and National Security Advisor Condoleeza Rice. President Bush shook the hands of everyone in the cafeteria.

"I said to him (Bush) 'God bless you.' He stopped and looked me in the eye and said, 'I appreciate that.' I'll never forget the look he gave me. He surely cleared up my blues."

Later, former Air Force Chief of Staff Gen. Ronald Fogleman buoyed Col. Bowley's spirits. "He hugged my neck and asked me what I was doing during the attack." After learning about his involvement he replied, "Good for you!"

Those kudos pale in comparison to what Col. Bowley experienced a few months later while attending the annual Army-Navy football game in Philadelphia.

A woman approached him after spotting his Pentagon memorial lapel pin. She asked, "Did you attend the Pentagon memorial ceremony?" When he said yes, she identified herself as the widow of the pilot of the plane that crashed into the Pentagon. She was attending the game with classmates of her husband who was a Naval Academy graduate.

"I couldn't talk. I was only able to say 'I am honored to meet you.' She then hugged me." His real healing began that day.

As for his co-workers, he believes they were comforted by God's strength conveyed through the selfless sacrifices of many people. Says he, "Leadership that day was everywhere and courage was common."

— Mr. Rudy Purificato, 311th HSW

Air Force photo by Ms. Sue Sapp, WR-ALC Public Affairs

Hats on to you!

ROBINS AIR FORCE BASE, Ga. — Ms. Patti Alexander and Ms. Lorenda Jones pose with other Logistics Management Directorate members at Warner Robins Air Logistics Center for a picture that will commemorate the day so many members came out to show support for two of their own. Ms. Alexander and Ms. Jones are currently undergoing chemotherapy, and this necessitates their wearing hats. To show solidarity with them during this time, some members of the directorate declared July 12 "Hat Day" and wore hats to show support. Approximately 100 people in the directorate showed up in hats of all varieties.

CE wins White House environmental award

HANSCOM AIR FORCE BASE, Mass. — Members of the 66th Civil Engineering Environmental Flight here recently accepted a White House environmental award presented for outstanding work on projects in the Environmental Preferability category. During the presentation, held in Washington D.C., 26 programs were honored for outstanding military and civilian efforts in various environmental categories.

Hanscom's Environmental Preferability projects focused on enhancing human health and the environment while reducing federal costs. The Environmental Flight created programs that reduce the amount of waste transportation fleet oil and oil filters use, encourage base people to commute and operate a toner cartridge-recycling program.

— Information provided by ESC Public Affairs

Ukraine academy honors AFRL researcher

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The Ukrainian National Academy of Sciences recently presented an Air Force Research Laboratory researcher here an honorary doctor of science degree, making him the fifth individual in as many years to receive the honor.

Mr. Lee Semiatin, materials and manufacturing directorate metals, ceramics and nondestructive evaluation division, received the award from the academy's G.V. Kurdyumov Institute for Metal Physics director and academician Volodymir Nemoshkalenko during a special ceremony in Kiev.

Mr. Semiatin's research has led to improvements in many existing processes and developing new processes for high temperature alloys used to build aerospace systems. In addition, his efforts have expanded the knowledge of titanium, titanium aluminide alloys and several other difficult-to-process materials such as nickel-based superalloys and refractory alloys.

— Information provided by AFRL Public Affairs

Edwards youth program wins best in Air Force

EDWARDS AIR FORCE BASE, Calif. — When base services officials say Edwards has the best youth program in the Air Force, they can prove it. Services recently learned their youth program earned top Air Force honors by winning the 2002 Best Youth Program Award.

Edwards youth program includes a youth activities center, teen center, youth center annex, a before and after school program, summer camp and youth sports. The program's significant achievements over the past year include: Opening a new teen center, providing a fun, friendly and safe environment to study and socialize. The center also offers diverse programs designed to educate and entertain teens. An innovative program called "Desert Rules," a friendly inter-base competition, helps foster strong relations with nearby Air Force base teen programs.

The youth employment skills program allows teens to volunteer with base employers and earn $1,000 in scholarship money towards college tuition, while gaining valuable job skills.

The youth program established a partnership with the base elementary schools. "Bridging the Gap" assists children in transitioning from kindergarten to first grade and provides supplemental transportation to bus children enrolled in "Power Hour," an after school reading and homework program.

— Information provided by AFFTC Public Affairs

AFRL scientist earns Good Housekeeping award

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Good Housekeeping Magazine officials, in collaboration with those from the Center for American Women and Politics, recently selected an Air Force Research Laboratory scientist here to receive the national magazine's Award for Women in Government.

Dr. Kathleen Robinette, the principal research physical anthropologist in AFRL's human effectiveness directorate, was nominated for her work in the Civilian American and European Surface Anthropometry Resource, or CAESAR program. CAESAR is the world's first successful whole-body 3-D anthropometric survey and a multi-million dollar, collaborative effort with more than 33 companies from six countries participating. The project, which Dr. Robinette organized and directed, will directly improve clothing sizing and the fit of automobiles, aircraft, furniture and workstations.

Dr. Robinette was selected from a group of more than 300 nominees this year. Recipients of the nine awards given were featured in the July issue of Good Housekeeping.

— Information provided by AFRL Public Affairs

AFRL contractor receives Silver Snoopy Award

BROOKS CITY-BASE, Texas — Dr. Jim Webb, a contractor for the Air Force Research Laboratory here, recently received the Silver Snoopy award.

The Silver Snoopy is the NASA Astronauts' Personal Achievement Award and is presented to individuals for outstanding contributions to the success of human flight missions. It is a sterling silver pin shaped like Snoopy wearing a space suit and helmet, and is taken on a space mission before it is given out. Dr. Webb's pin flew on the Shuttle mission STS-98 in February 2001.

Dr. Webb works with AFRL's High Altitude Protection Research program. NASA presented him with the award for his knowledge and research on exercise enhanced preoxygenation that has application to both NASA and Air Force operations. His work has been incorporated as operational procedure during preparations for work done in space outside the International Space Station and has dropped the prebreathe time by 30 percent.

— Information provided by 311th HSW Public Affairs

Researcher awarded Arthur S. Flemming Award

ROME, N.Y. — Dr. Bruce Suter, founder and current director of the Center for Transmission and Exploitation at the Air Force Research Laboratory here, has been awarded the Arthur S. Flemming Award for Scientific Achievement. The award was presented during ceremonies at George Washington University recently. Established in 1948, the Flemming Awards honor outstanding federal employees with three to 15 years of government service for their extraordinary contributions to the federal government.

Recognized by the president, agency heads and the private sector, the winners are selected from all areas of the federal service. Each year there are twelve recipients; four each selected for the administrative, scientific and applied science categories.

Dr. Suter was selected for the award based on his exceptional professional and community service as a principal member of the technical staff at the AFRL Information Directorate.

— Information provided by AFRL Public Affairs

Eglin's JASSM garners DOD Packard award

EGLIN AIR FORCE BASE, Fla. — The Joint Air-To-Surface Standoff Missile program here was awarded the Defense Department David Packard Award. The award was recently presented at the Pentagon by Mr. Edward Aldridge Jr., Undersecretary of Defense for Acquisition, Technology, and Logistics.

The award is given to DOD organizations displaying use of innovative team techniques first advocated by Mr. David Packard to achieve excellence in defense acquisition. Mr. Packard was the deputy secretary of defense during the Richard Nixon administration, the founder and chairman of the Hewlett-Packard Company and chairman of the Presidential Commission on Defense Management chartered by former President Ronald Reagan in 1985.

The JASSM program competed against 29 other programs from all branches of the military and was one out of six programs to win.

The criteria for award winners are: Reduced life cycle cost; making the acquisition system more efficient; responsive and timely integrating defense with the commercial base and practices; promoting continuous improvement in the acquisition process and accomplishing specific goals associated with acquisition reform initiatives.

— Information provided by AAC Public Affairs

AFRL commander wins Hap Arnold Award

WRIGHT-PATTERSON AIR FORCE BASE, Ohio, — The American Institute of Aeronautics and Astronautics has announced that Maj. Gen. Paul Nielsen, Air Force Research Laboratory commander, will be the recipient of this year's Hap Arnold Award for Excellence in Aeronautical Program Management.

AIAA is the principal society of aerospace engineers and scientists. The award, named after the first general of the Air Force, Henry Harley "Hap" Arnold, is presented to individuals for outstanding contributions in the management of a significant aeronautical or aeronautical related program or project.

The award citation recognized Gen. Nielsen for "outstanding contributions to the restructuring of the Milstar satellite program, for an exemplary role as Director of Plans for NORAD and for visionary leadership of AFRL." The award will be presented at an awards luncheon Oct. 1, held in conjunction with the AIAA Aircraft Technology, Integration and Operations Forum, in Los Angeles.

— Information provided by AFRL Public Affairs

Lieutenant wins national 'Woman of Color' award

KIRTLAND AIR FORCE BASE, N.M. — 1st Lt. Rojan Quarles has won the 2002 Women of Color in Government and Defense Research Leadership Award by proving herself to be a consistent leader in discovering, developing and implementing new technologies associated with Hyperspectral imaging aboard Air Force Research Laboratory's MightySat II.1 satellite. Lt. Quarles was among 30 women so honored for their achievements at the second annual Women of Color Government and Defense Technology Awards conference held recently in Washington, D.C.

— Information provided by AFRL Public Affairs

Idea earns ASC employee $10,000, saves millions

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — A telephone call that interrupted Mr. Joseph Heinig's rest recently ended up with him getting a $10,000 check. The telephone call came from Lt. Gen. Dick Reynolds, Aeronautical Systems Center commander here, asking him to be at a recent F-22 systems program office meeting.

Mr. Heinig, the SPO's radar integrated product team leader, heeded the invitation and received a huge $10,000 check for a cost-saving technique submitted through the Innovative Development through Employee Awareness program. The IDEA program rewards people for ideas or programs that result in the government saving money or reducing costs.

His idea was a new technique to test and calibrate the F-22 Raptor's advanced APG-77 radar system that eliminates the need to perform APG-77 radar calibration testing in expensive, specialized test chambers. Officials said the technique saves two to three weeks of set-up time per radar tested and officials estimate the Air Force saving $7 to $10 million in life cycle cost to the F-22 program.

— Information provided by ASC Public Affairs